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ABSTRACT

This interlibrary loan (ILL) cost study was conducted at Union College Library in Schenectady, New York, in order to provide immediate feedback about ILL as well as to serve as a potential management tool for library and college administrators. This report describes the financial statistics of a 3-year period of use of ILL services at this small, private college library. Following a review of previous cost studies, the researchers chose to use available year-long data sets to calculate (rather than estimate) interlibrary loan transaction costs as precisely as possible. Costs per transaction were calculated based on the actual costs of insurance, fees, and charges incurred by the library on behalf of patrons; telecommunications; local library council dues; salaries, wages, and fringe benefits; and on closely figured estimates of postage, photocopying expenses, and overhead for all regular and student employees' salaries and wages. This paper includes an interpretation of the study results, discussion and conclusions, and numerous tables presenting the detailed costs by academic year and percentage increases in both extra-organizational ILL cost components, and extra-organizational cost shifts. (THC)

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An Interlibrary Loan Cost Study

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AN INTERLIBRARY LOAN COST STUDY

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ABSTRACT

This interlibrary loan cost study conducted at Union College Library was designed to provide immediate feedback about ILL as well as serve as a potential management tool for library and college administrators. It describes the financial statistics of a three-year period of use in interlibrary loan at this small, private college library.

INTRODUCTION

Given that we as librarians exercise so little influence over the unfavorable fiscal climate within which we operate, it becomes increasingly important for us to be even more effective managers of the resources, collections, and services we control. Responsible budgeting and planning require the accurate data and dependable information on library operations that our professional experience contributes. The need of library administrators for hard data and reliable feedback from within the organization can be partially satisfied by interlibrary loan's unique ability within the framework of that organization to provide both. It is the intent of this article to report the detailed results of an ILL cost study conducted at Union College Library over the course of three years, in an effort to establish interlibrary loan cost data as a library management tool.

DATA: THE ILL COST STUDY

While general interlibrary loan statistics record the volume and success rates of document requests and delivery, a cost study can measure the efficiency with which these documents are provided to the library's clientele. Moreover, the establishment of the actual cost per transaction contributes to informed decision-making at several levels within a particular library.

In making our study, the first step we took was to review previous cost studies, primarily that done by Jo Ellen Herstand at the 1,800,000 volume University of Oklahoma library in 1978,¹ (her study, in turn, was based on Vernon E. Palmour's precedental 1972 study for the Association of Research Libraries²). Herstand's and Palmour's methodologies helped us establish our procedures, but we undertook our research in order to obtain results based on ILL practiced in a *small* college library setting, rather than a university-based experience.

After consulting with a Union College MBA student about statistical applications, we determined that we could adapt the Herstand/Palmour studies to suit our purposes: we would use available year-long data sets to calculate (rather than estimate) interlibrary loan transaction costs as precisely as possible. Furthermore, as we were not bound by the severe time and sample constraints Herstand faced in conducting her study, we determined to extend our cost study over the course of three academic years in order to test the validity and general statistical reliability of the methods we had developed or employed [see Appendix], and in order to create the beginnings of a database for future cost projections.

We calculated the cost per transaction based on the actual costs of insurance, fees and charges incurred by our library on behalf of our patrons, telecommunications, local library council dues, salaries, wages, and fringe benefits; and on closely figured estimates of postage, photocopying expenses, and overhead for all regular and student employees' salaries and wages. The overhead was calculated at a Union College constant of 61% for 1980/81, 60%

the following year, and 62.2% for the most recent academic year. A detailed breakdown for the 1982/83 academic year appears in **Table 1: Costs of Interlibrary Loan Operation by Category**. The same data elements are compared, although in less detail, for the past three years in **Table 2**.

According to these calculations, our costs per transaction for the most recent year (July 1, 1982-June 30, 1983) averaged \$5.91. This compares to per transaction costs of \$5.48 during the 1980/81 academic year and \$5.77 in 1981/82. ILL cost components fall into two categories: intra-organizational, or personnel-related costs (salaries, fringe benefits, overhead) and extra-organizational, or service-related costs (postage, insurance, charges, photocopying, telecommunications, network dues), and salaries tend to be site-specific. We decided, therefore, that it would be useful to concentrate on the extra-organizational cost components alone.

Current extra-organizational (i.e., non-personnel-related) costs averaged \$.90 per borrowing transaction and \$.35 per lending transaction. The extra-organizational costs of borrowing rose from \$.64 in 1980/81 to \$.86 the next year, while lending costs were \$.34 for the first two years of the study. (See **Table 3: Extra-Organizational ILL Borrowing and Lending Costs**.) While these expenditures make up only about 10-12% of total ILL expenditures, they are the costs which must be monitored most closely, for two reasons: they are beyond the control of the organization; and they are 'volatile' costs (as **Table 4: Inflation in Extra-Organizational ILL Cost Components** demonstrates at the unit price level). **Table 5: Extra-Organizational Cost Shifts** examines specific components in regard to how much of the non-salary-related ILL budget they consume, and gives some indication of their relative importance and direction of movement.

INTERPRETATION

In comparative terms, the figures represent a relatively cost-effective library service. The collection is being supplemented with research materials (many of which have a limited prospect of recurring or long-range demand) for individual scholarly use at a lower cost than the purchase prices for these materials. Compared to the 24.1% average increase in American hardcover book prices and a 29.7% jump in American periodicals prices from 1980 to 1982³ or even to the gentler 20.2% climb of the CPI from 248.0 in July 1980 to 298.1 in June 1983, interlibrary loan's modest 7.8% increase represents a bargain.

We introduce a note of caution here: Union's exceptionally high volume of ILL activity indicates that the factor of economy of scale should apply; this means that our figures, particularly our per transaction costs, are not necessarily transferable to all smaller-sized libraries. However, the patterns evidenced in the study should be generally applicable.

DISCUSSION AND CONCLUSION

Our study has provided for us the kind of tangible cost-justification that the present economy demands of librarians. The results clearly establish that our operation is cost-effective for our Library's needs.

The much-discussed re-emergence of serious students on college campuses, as well as the continued pressure on faculty to publish, create a heightened awareness and appreciation within both groups of such library services as interlibrary loan. These factors combine to produce steady high rates of ILL activity.

As libraries continue to experience these high rates of interlibrary loan activity, our ability to interpret and capitalize on our interpretations of ILL-generated statistics will become even more critical. Our future exploitations of the vantage point afforded by the practice of interlibrary loan and a subsequent cost-analysis of the service will enhance decision-making for those of us directly involved in the ILL process, and for those in administrative roles as well.

REFERENCES

1. Jo Ellen Herstand, "Interlibrary Loan Cost Study and Comparison," *RQ* 20:249-256 (Spring 1981).
2. Vernon E. Palmour and others, comps, *A Study of the Characteristics, Costs, and Magnitude of Interlibrary Loans in Academic Libraries* (Westport, Conn.: Greenwood, 1972).
3. Nelson A. Piper, "Prices of U.S. and Foreign Published Materials," in *The Bowker Annual of Library and Book Trade Information*, ed. by Joanne O'Hare, 28th ed. (New York and London: R.R. Bowker Company, 1983), 385-403.

APPENDIX

DATA ELEMENTS

Compiling ILL Cost Study Data: Sources and Methods

POSTAGE: All figures are estimates which take into account each fluctuation in first class and library rate charges. In determining the volume of mailing activity, we relied upon several factors developed by our Schaffer Library colleague David R. Gerhan for an internal cost-justification of the OCLC/ILL Subsystem in March, 1979. Sampling past transactions, he determined that, relying on OCLC holdings information, we mailed out 1.2 requests on ALA forms for each book supplied, and that we renewed 10% of those requests. Similarly, it took 1.4 mailed attempts to obtain a periodical article.

INSURANCE: Based on the value of Parcel Post shipments reported by ILL at a rate of \$.45/\$100. Source: College business office.

CHARGES AND FEES INCURRED: Invoices and pre-payments for items borrowed.
Source: Library accountant.

PHOTOCOPYING: This is an estimate obtained by multiplying the number of photocopy requests filled by the average number of pages per request at \$.03 per exposure. Source of estimated pages: a sample of 50 invoices received from other libraries which specifically indicated the number of exposures for which we were being charged.

TELECOMMUNICATIONS: Service contract on telecopier; invoices from Western Union; and invoices from SUNY/OCLC. Source: Library administration office.

LOCAL LIBRARY NETWORK DUES: From the annual invoice from the Capital District Library Council. Dues are distributed proportionally for borrowing and lending in
TABLE 3. Source: Library administration office.

SALARIES: Professional and paraprofessional salary figures come from annual salary letters. Student assistant figures were supplied by the library student personnel officer.

OVERHEAD: Based on a Union College constant of 61% of all regular and student employees' salaries in 1980/81, 60% in 1981/82, and 62.2% in 1982/83. Source: College business office.

FRINGE BENEFITS: Detailed in professional and paraprofessional salary letters.

TABLE 1

COSTS OF INTERLIBRARY LOAN OPERATION BY CATEGORY

Detailed costs for 1982/83

POSTAGE: (estimated)	
1. Return postage on books borrowed	\$518.33
2. Postage on books loaned	102.35
3. Postage on periodical requests filled	22.80
4. Postage on ALA forms, including renewal requests, notices that book has been returned, and unfilled/abandoned requests	29.40
5. Correspondence	10.40
	\$683.28
INSURANCE:	\$135.00
CHARGES AND FEES INCURRED:	
1. Faculty fund	\$919.43
2. Student fund	697.77
	\$1617.20
PHOTOCOPYING: (estimated)	\$528.30
TELECOMMUNICATIONS:	
1. Telecopier	\$159.96
2. Teletype	1969.93
3. OCLC/ILL	1932.24
	\$4062.13
LOCAL LIBRARY COUNCIL DUES:	\$1200.00
SALARIES:	
Professional (1), paraprofessional (1), student assistants (1.5 FTE)	\$33,608.16
OVERHEAD:	
Calculated at College constant of 62.2% of all salaries	\$20,904.28
FRINGE BENEFITS:	
Professional (1), paraprofessional (1)	\$3349.00
TOTAL 1982/83 ILL COSTS:	\$66,087.35

TOTAL COSTS/TOTAL TRANSACTIONS = COST PER TRANSACTION

$$\$66,087.35/11,181 = \$5.91$$

TABLE 2
COSTS OF INTERLIBRARY LOAN OPERATION BY CATEGORY

General comparative costs for 1980/81-1982/83

	1980/81	1981/82	1982/83
POSTAGE:	\$448.10	\$619.64	\$683.28
INSURANCE:	77.00	94.00	135.00
CHARGES AND FEES:	945.76	1433.63	1617.20
PHOTOCOPYING:	580.50	604.63	528.30
TELECOMMUNICATIONS:	3086.03	4382.27	4062.13
LOCAL NETWORK DUES:	1200.00	1200.00	1200.00
SALARIES:	32,275.48	35,466.29	33,608.16
OVERHEAD:	19,688.04	21,267.77	20,904.28
FRINGE BENEFITS:	4879.08	3718.90	3349.00
TOTAL:	<u>\$63,179.99</u>	<u>\$68,767.30</u>	<u>\$66,087.35</u>
TRANSACTIONS:	11,521	11,911	11,181
COST PER TRANSACTION:	\$5.48	\$5.77	\$5.91

TABLE 3

EXTRA-ORGANIZATIONAL ILL BORROWING AND LENDING COSTS

Comparative costs for 1980/81-1982/83

	1980/81	1981/82	1982/83
Borrowing - All Transactions			
POSTAGE:	\$372.97	\$482.16	\$555.53
INSURANCE:	62.60	73.98	112.81
CHARGES AND FEES :	945.76	1433.63	1617.20
TELECOMMUNICATIONS:	3086.03	4382.27	4062.13
LOCAL NETWORK DUES:	764.66	751.74	742.72
TOTAL - BORROWING:	\$5232.02	\$7123.78	\$7090.39
TRANSACTIONS:	8263	8353	7882
COST PER TRANSACTION:	\$.63	\$.85	\$.90
Lending - All Transactions			
POSTAGE:	\$75.13	\$137.48	\$127.75
INSURANCE:	14.40	20.02	22.19
PHOTOCOPYING:	580.50	604.80	528.30
LOCAL NETWORK DUES:	435.34	448.26	457.28
TOTAL - LENDING:	\$1105.37	\$1210.56	\$1135.52
TRANSACTIONS:	3258	3558	3278
COST PER TRANSACTION:	\$.34	\$.34	\$.35

TABLE 4

INFLATION IN EXTRA-ORGANIZATIONAL ILL COST COMPONENTS

	Unit Price	Unit Price	Percent
	July 1, 1980	June 30, 1983	Increase
POSTAGE:			
First Class (1 oz.)	\$.15	\$.20	33.3%
Library Rate (1 lb.)	.17	.47	176.5%
INSURANCE: (avg. parcel)	.07	.10	42.9%
CHARGES AND FEES : (avg.)	.85	1.19	40.0%
OCLC/ILL: (per request)	.95	1.26	32.6%

TABLE 5

EXTRA-ORGANIZATIONAL COST SHIFTS

Extra-organizational Costs and Their Percentages of

Total Extra-organizational Expenditures

	1980/81	Percent	1982/83	Percent
POSTAGE:	\$448.10	7.1%	\$683.28	8.3%
INSURANCE:	77.00	1.2%	135.00	1.6%
CHARGES AND FEES :	945.56	14.9%	1617.20	19.7%
PHOTOCOPYING:	580.50	9.2%	528.30	6.4%
TELECOMMUNICATIONS:				
Telecopier	144.00	2.3%	159.96	1.9%
Teletype	1835.31	29.0%	1969.93	24.0%
OCLC/ILL	1106.72	17.5%	1932.24	23.5%
NETWORK DUES:	1200.00	18.9%	1200.00	14.6%
TOTALS	\$6337.19	100.1%	\$8225.91	100.0%